STRONG3000

TECHNICAL DATA SHEET

Industry Sheet · Revision: November 2026

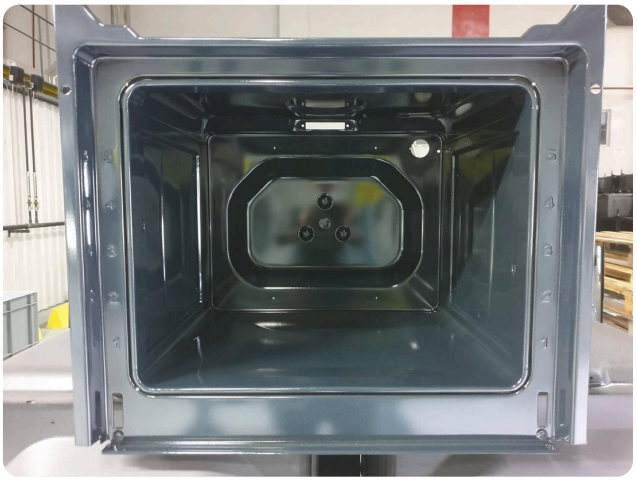
INDUSTRIES

# Surface Finishing Technologies for Home Appliance Manufacturing

Durable, consistent finishes for home appliance parts — from powder coating to vitreous powder enamel, engineered for high-volume production.

**Open online**

strong3000.com/en/industries/home-appliances/



OVERVIEW

## Engineering for Home Appliance Lines.

Home appliance manufacturing requires surfaces that withstand heat, cleaning, corrosion and daily use, applied consistently at production volume. STRONG3000 engineers the application, automation and curing technology behind these surfaces — including deep expertise in powder enamel for parts exposed to high temperatures.

From individual application equipment to complete turnkey lines, we tailor the process to every home appliance part and production target.



APPLICATIONS

## Parts We Help Coat.

Every part has its own challenges — corner radii, weld seams, sharp edges. Below we summarize how we approach home appliance parts; you can download part-specific technical datasheets (PDF) for the detailed engineering/metallurgy approach.



POWDER ENAMEL

### Oven Cavity (Interior)

Risk of fish scale at corner radii and weld zones; decarburized steel and controlled firing for an interior surface that withstands 475 °C pyrolysis.

Technical Datasheet (PDF)

OWL Integration



WET ENAMEL

### Cooktop Grates & Pan Supports

Outgassing in cast iron can cause blistering; matte, heat-resistant wet enamel withstands open flame and thermal cycling.

Technical Datasheet (PDF)



POWDER COATING

### Refrigerator Exterior Panels

Color/gloss consistency over large surfaces is critical; a uniform oven profile on thin sheet for a smooth, durable powder coated finish.

Technical Datasheet (PDF)



POWDER COATING

### Range Hood & Extractor Housings

Complex geometry exposed to grease and steam; robotic application against the Faraday effect and a stain-resistant, chemical-resistant powder.

Technical Datasheet (PDF)

OWL Integration



POWDER ENAMEL

### Water Heater / Boiler Tanks (Interior)

Non-porous coverage of internal weld seams is essential; electrostatic powder enamel for long life under hot water, pressure and fluctuating pH.

Technical Datasheet (PDF)

OWL Integration



POWDER COATING

### Washing Machine & Dishwasher Chassis/Panels

Risk of corrosion and adhesion loss in humid, vibrating environments; conversion coating + powder coating for protected chassis and body panels.

Technical Datasheet (PDF)

OWL Integration



DEEP PARTS · CAVITY

## For deep parts like oven cavities: OWL.

In classic lines the gun enters the cavity straight; corners stay thin and edges build up. With OWL the movement is in the gun itself: the head group turns up to 75 degrees in every direction and directs powder straight onto corners, edges and inner surfaces.

- Head group 75° in every direction
- Live coverage map
- Local correction in a few taps
- 25% powder savings

SOLUTIONS

# The Right Process for Every Part.

### Powder Coating

Durable decorative and protective finishes for panels, frames and exterior parts.

### Powder Enamel

Electrostatic vitreous enamel for oven cavities, panels and water heater/boiler tanks.

### Automation

Reciprocators and robotics for consistent, high-volume home appliance production.

### Turnkey Lines

Complete finishing plants engineered around your home appliance production targets.

### Smart AI Control

Adaptive control for repeatable results across a wide variety of home appliance parts.

WHY STRONG3000 FOR HOME APPLIANCES

## Our Enamel Expertise Sets Us Apart.

Many home appliance parts — especially oven cavities and water heating components — require vitreous or porcelain enamel instead of standard powder coating. STRONG3000's expertise in powder and wet enamel means a single partner can engineer both the coating and enameling stages of your line.

- ✓ Powder & vitreous enamel expertise
- ✓ Deep & cavity geometry application (OWL)
- ✓ High-volume automation & turnkey delivery



CASE STUDY

# Home Appliance Coating in Production.



Powder Enamel · Cavity

## Cavity Powder Enamel Plant

Cavity (oven interior) electrostatic powder enamel coating plant for Silverline.

| | |
|---|---|
| Country | **Türkiye** |
| Project No. | **0472** |



Enamel · Overhead Conveyor

## Cooktop Burner Cap Enameling Line

Enamel coating line with overhead conveyor for cooktop burner caps.

| | |
|---|---|
| Country | **Türkiye** |
| Project No. | **0559** |



Powder Coating · Booth

## Range Hood / Extractor Cover Powder Coating Booth

Electrostatic powder coating application booth for range hood and extractor covers.

| | |
|---|---|
| Scope | **Powder coating booth** |
| Project No. | **1467** |

See all case studies →

WHY STRONG3000?

# The Engineering Difference.

We don't sell equipment and walk away; we stay with your line from design through commissioning and beyond.

**Integrated Engineering**

Machinery, electrical, automation and software under one roof — not sourced and assembled.

**In-House Technology**

Smart AI and OWL are original STRONG3000 technologies developed in-house.

**Proven Experience**

25+ years of engineering; installation, commissioning and service in 40+ countries.

**24/7 Support**

Phone, remote connection and 24/7 live support via WhatsApp.

## Quotes & Technical Consulting

Tell us about your part, capacity and process. A STRONG3000 engineer will get back to you with a tailored proposal.

| | |
|---|---|
| Production Center | Ömerli Mah. Elektro 2000 Sanayi Sitesi B18 Blok, Tunaboyu Sk. No:1AZ, 34555 Arnavutköy / Istanbul, Türkiye |
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FOR A QUOTE, PREPARE

- Product to Be Coated
- Max. Part Dimensions
- Required Capacity
- Number of Colors
- Daily Color Changes
- Coating Process
- Project Timeline

Values are typical ranges; final values are confirmed per project by STRONG3000 engineering. This sheet summarises the product page on our website; scan the QR code for the latest information.